The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

Paper No. 24

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte THAUMING KUO

Appeal No. 1999-0125 Application 08/427,534

ON BRIEF

Before PAK, WARREN and JEFFREY T. SMITH, Administrative Patent Judges.

WARREN, Administrative Patent Judge.

Decision on Appeal and Opinion

We have carefully considered the record in this appeal under 35 U.S.C. § 134, including the opposing views of the examiner, in the answer, and appellant, in the brief, and based on our review, find that we cannot the rejection of appealed claims 24 through 29,¹ all of the claims in the application, under 35 U.S.C. § 103(a) as being unpatentable over Vachon in view of Blount and Billmeyer.² For essentially the reasons pointed out by appellant in the brief, the examiner has failed to make out a *prima facie* case with respect to both grounds of rejection. We add the following for emphasis.

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¹ See the amendment of January 27, 1998 (Paper No. 14) which limits the addition-copolymerization to solution conditions, deleting bulk conditions. The claims as so amended appear in Appendix B of the brief.

² Answer, pages 3-6.

A *prima facie* case of obviousness is established by showing that some objective teaching, suggestion or motivation in the applied prior art taken as a whole and/or knowledge generally available to one of ordinary skill in the art would have led that person to the claimed invention as a whole, including each and every limitation of the claims, without recourse to the teachings in appellants' disclosure. *See generally, In re Rouffet*, 149 F.3d 1350, 1358, 47 USPQ2d 1453, 1458 (Fed. Cir. 1998); *Pro-Mold and Tool Co. v. Great Lakes Plastics Inc.*, 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1629-30 (Fed. Cir. 1996); *In re Vaeck*, 947 F.2d 488, 493, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991); *In re Fine*, 837 F.2d 1071, 1074-76, 5 USPQ2d 1596, 1598-1600 (Fed. Cir. 1988); *In re Dow Chem. Co.*, 837 F.2d 469, 473, 5 USPQ2d 1529, 1531-32 (Fed. Cir. 1988).

The threshold issue in this appeal is whether, as a matter of fact, the disclosure in Vachon that "[t]o obtain the grafted copolymers of this invention, conventional polymerization techniques may be employed" (col. 6, lines 58-60), when considered in the context of the further disclosure that the specified polymerization system is "free radical emulsion polymerization conditions" (e.g., col. 1, lines 31-32), would have reasonably been understood by one of ordinary skill in this art to teach or infer that polymerization systems other than free radical emulsion polymerization can be used to prepare the copolyesters taught in the reference³ (answer, pages 7-8; brief, pages 7-9). In this respect, we agree with appellant that, in the context of the reference as a whole, "Vachon refers only to conventional emulsion polymerization techniques" (brief, page 9). Indeed, the examiner offers only the statement that "[i]n short, this disclosure is inconclusive" (answer, page 7).

In the absence of a teaching or inference in Vachon that polymerization systems other than free radical emulsion polymerization can be used, the examiner must provide objective evidence or scientific explanation establishing that the applied prior art taken as a whole and/or

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³ It is well settled that a reference stands for all of the specific teachings thereof as well as the inferences one of ordinary skill in this art would have reasonably been expected to draw therefrom, *see generally, In re Fritch*, 972 F.2d 1260, 1264-65, 23 USPQ2d 1780, 1782-83 (Fed. Cir. 1992); presuming skill on the part of this person. *In re Sovish*, 769 F.2d 738, 743, 226 USPQ 771, 774 (Fed. Cir. 1985). In considering the disclosure of a reference, the definition of a term or the meaning of a phrase must be construed within the context of the reference as interpreted by one of ordinary skill in this art.

knowledge generally available to one of ordinary skill in the art would provide a suggestion or motivation to use such other polymerization systems, particularly solution addition-copolymerization, with a reasonable expectation of success in obtaining the polymer products taught by Vachon, in order to establish a *prima facie* case of obviousness over the applied prior art. *See, e.g., Dow Chem.*, 837 F.2d at 473, 5 USPQ2d at 1531 ("The consistent criterion for determination of obviousness is whether the prior art would have suggested to one of ordinary skill in the art that [the claimed process] should be carried out and would have a reasonable likelihood of success viewed in light of the prior art. [Citations omitted] Both the suggestion and the expectation of success must be founded in the prior art, not in the applicant's disclosure."). This, the examiner has not done by relying on the general teachings of Billmeyer.

We agree with appellant that Billmeyer merely "discusses various advantages and disadvantages of each" of several polymerization systems, and indeed, Table 12-1 (page 356) shows that solution polymerization and emulsion polymerization are different (brief, pages 8 and 10-11). The examiner takes the position that from such teachings, "the skilled artisan would have found it obvious to select any well known polymerization technique (such as bulk or solution), for the polyester of Vachon, since all have been for many years wherein the skilled artisan readily acknowledges the advantages/disadvantages and any differences between the use of each technique," and thus would have been motivated by the selection of "advantages" to use the polymerization system specified in the appealed claims (answer, page 5; see also page 8). Appellant argues that even though the process of Vachon could be so modified, there must be a suggestion of the desirability of doing so (brief, page 12). We agree with appellant.

On this record, the examiner has merely established that it would have been "obvious to try" other polymerization systems which is an impermissible standard for determining patentability under 35 U.S.C. § 103(a). *See generally, In re O'Farrell*, 853 F.2d 894, 903-04, 7 USPQ2d 1673, 1681 (Fed. Cir. 1988). Indeed, the mere fact that the polymerization systems specified by the appealed claims and by Vachon are well known and have recognized advantages does not establish that one of ordinary skill in the art would have recognized from consideration of the known advantages *alone* that the products of Vachon taught to be successfully obtained

from the combination of reactants by the use of an emulsion polymerization system, can also be successfully obtained by the use of a solution polymerization system.⁴

The examiner's decision is reversed.

Reversed

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Morgan Lewis & Bockius LLP

⁴ In Appeal No. 96-0007 in parent application 08/104,980, a prior merits panel of this Board considered claims to a resin composition characterized as prepared by the process claimed in the present appeal. That panel, in affirming a ground of rejection based on Vachon but without Billmeyer, held that "[w]hile . . . bulk and solution polymerization specified in appealed claim 1 is different from aqueous emulsion polymerization utilized by Vachon and . . . this reference discloses only aqueous emulsion polymerization, we do not find the arguments submitted by appellant to effectively establish that the acrylic-modified polyester resin compositions formed from the *same* polyesters and ethylenically unsaturated vinyl monomers in the *same* concentrations by different polymerization processes are not identical or substantially identical" (decision, page 6). Our reversal of the ground of rejection of appealed claims drawn to the same process is not inconsistent with the prior panel's decision. *See In re Wertheim*, 541 F.2d 257, 271, 191 USPQ 90, 103-04 (CCPA 1976) ("These claims are cast in product-by-process form. Although appellants argue, successfully we have found, that the [reference] disclosure does not suggest . . . appellants' process, the patentability of the products defined by the claims, rather than the processes for making them, is what we must gauge in light of the prior art.").

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